

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,488	10/01/2003	Hiroharu Matsuoka	MATSUOKA=16A	4670
759	90 05/27/2004		EXAM	INER
BROWDY AND NEIMARK, P.L.L.C.			HUANG, EVELYN MEI	
SUITE 300 624 NINTH STREET, N.W. WASHINGTON, DC 20001-5303			ART UNIT	PAPER NUMBER
			1625	

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Antique Commence	10/674,488	MATSUOKA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Evelyn Huang	1625				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of the	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) daywill apply and will expire SIX (6) MONTHS from the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	_•					
·	action is non-final.					
3) Since this application is in condition for allowar	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-13</u> is/are rejected.		•				
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acce		- -vaminer				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correcti						
11)☐ The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
<u> </u>		4.00				
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No. 09/701188.						
3. ☐ Copies of the certified copies of the prior						
application from the International Bureau						
* See the attached detailed Office action for a list of	. ,,	d.				
	1					
		*				
Attachment(s)	•					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (PTO-413)				
Proper No(s)/Mail Date	Paper No(s)/Mail Dat 5) Notice of Informal Pa 6) Other:					
Date Land Tandarand Office						

Application/Control Number: 10/674,488

Art Unit: 1625

Page 2

DETAILED ACTION

1. Claims 1-13 are pending.

Priority

2. This is a divisional of 09/701188. An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification of in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 1,
 - Does applicant intend to claim a compound or a mixture of addition salts
 or a mixture of hydrates? It is recommended that the claims be amended
 to the singular/alternative format, e.g. A compound,.....or an addition
 salt thereof,..., or a hydrate thereof.'
 - Definition of A1 and A2, does applicant intend '-CH+' to be '-CH=' and '-N-' to be '-N='?
- b. Claim 2 (wherein Het is a 5-6 membered, monocyclic aliphatic heterocyclic group or aromatic heterocyclic group) does not further limit the base claim 1 (wherein the

Art Unit: 1625

specific Het is described) since it is broader in scope than claim 1, and therefore does not have antecedent basis in base claim 1.

- c. Claim 3 (wherein Het is a 5-6 membered, monocyclic aliphatic heterocyclic group or aromatic heterocyclic group) does not further limit the base claim 1 (wherein the specific Het is described) since it is broader in scope than claim 1, and therefore does not have antecedent basis in base claim 1.
- d. Claim 7, it is recommended that a semicolon be inserted between '-CH=' and 'or addition salts' for clarification purposes.
- e. Claim 8, it is recommended that a semicolon be inserted between '4-fluorobenzyl group' and 'or addition salts' for clarification purposes.

The rejection is applicable to claims dependent on the above claims.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The instant method of inhibiting cyclooxgenase-2 reaches out to as yet unidentified conditions/activities/diseases, the description of which is not found in the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 1625

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention.

The court holds that claims directed to mediating a biological pathway are devoid identifiable utility and are therefore not useful. Unless the pathway at issue is critical to treating some condition and the pathway modification and disease treatment are inexorably linked, such pathway modification is devoid of utility. The instant claim directed to a mechanism of inhibiting COX-2 without the end result would therefore have no practical utility unless the inhibition of COX-2 and the treatment of inflammation are inexorably linked. Since the claims as recited embrace any degree of inhibition of COX-2, which may or may not inexorably linked to the treatment of inflammation, the scope of the claims is therefore not commensurate with that of the objective enablement, especially in view of the absence of a full written description of the as yet unidentified conditions/activities/disorders which the recited mechanism reaches out to. One of ordinary skill in the art therefore would not be able to use the inventive compound as claimed without undue experimentation.

Allowable Subject Matter

6. The inventive compound, its composition and method of treating inflammation would be allowable upon obviating the 112 second paragraph rejection.

Matsuoka (WO 97/30030, PTO-1449) discloses a 5-alkylsulfonyl-2-alkyl indolyl compound with COX-2 inhibitory activity. The instant, however, is a pyrrolopyridine compound substituted with 5-alkylsulfonyl and 2-($\rm CH_2$)₀₋₂-Het - . Motivation to modify Matsuoka's compound via multiple changes to arrive at the instant invention is lacking.

Art Unit: 1625

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 571-272-0686. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner

Art Unit 1625